

Title (en)  
REFRIGERATING APPARATUS

Title (de)  
KÜHLVORRICHTUNG

Title (fr)  
APPAREIL FRIGORIFIQUE

Publication  
**EP 1860389 A1 20071128 (EN)**

Application  
**EP 06715161 A 20060303**

Priority  
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Abstract (en)  
A first and a second expansion and compression machine (30, 40) having different volume ratios (  $V_c / V_e$  ) are connected in parallel to a refrigerant circuit (10) of a refrigeration apparatus. Expanders (31, 41) of the expansion and compression machines (30, 40) are connected in parallel. Compressors (32, 42) of the expansion and compression machines (30, 40) are also connected in parallel. Upon variation in the operating condition of the refrigeration apparatus, the ratio of rotation speed between the expansion and compression machines (30, 40) is controlled by a controller (60). This, as a result, allows the refrigeration apparatus to operate at a COP close to an ideal condition.

IPC 8 full level  
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Cited by  
EP2196751A4; EP2975337A4; US8590326B2; WO2009117787A3; US9746234B2; US10168078B2

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